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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,312	09/16/2003	Steven P. Meshenky	00655-1144	1337

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WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
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CHICAGO, IL 60661

EXAMINER

EDGAR, RICHARD A

ART UNIT PAPER NUMBER

3745

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/663,312

Applicant(s)

MESHENKY ET AL.

Examiner

Richard Edgar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2003 under 37 CFR 1.53(b).  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 8-27 is/are allowed.  
6) ☒ Claim(s) 1-4 is/are rejected.  
7) ☒ Claim(s) 5-7 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/29/2003.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Specification***

The disclosure is objected to because of the following informalities:

On page 10, line 9, numeral "46" should be -- 45 --.

Appropriate correction is required.

***Claim Objections***

Claims 1, 8, 14 and 20 are objected to because of the following informalities:

Claim 1, line 7, "compressor" should be -- turbine --.

Claim 8, line 7, "compressor" should be -- turbine --.

Claim 14, line 2, "tbs" should be -- tabs --.

Claim 20, line 7, "compressor" should be -- turbine --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,764,279 issued to Meshenky.

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The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The '279 patent discloses a rotary compressor, comprising: a shaft 18 rotatable about an axis; at least one compressor wheel 20 mounted on said shaft for rotation therewith and having an inlet end of relatively small diameter and a radial discharge end of relatively large diameter; a nominally donut-shaped intercooling heat exchanger 36 centered about said shaft and adjacent said compressor wheel, said heat exchanger having heat exchange fluid flow paths in heat exchange relation with each other including a compressed gas flow path and a coolant flow path, said coolant flow path being bounded in part by a wall 46 of a diameter at least as great as said relatively large diameter; a housing 10 for said compressor wheel and said heat exchanger and together with said wall defining a compressed gas directing space extending from said radial discharge end to an entrance to said compressed gas flow path; and a plurality of flow straightening vanes 80 thermally coupled to said wall and extending across said compressed gas directing space so that heat in said compressed gas may be rejected to said vanes and then to coolant in said coolant flow path.

Said wall 46 is generally radially extending and on an end of said heat exchanger closest to said compressor wheel 20 and includes a section of greater diameter than

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said relatively large diameter, said vanes 80 extending generally radially and being aligned with said section.

Said vanes 80 are mounted on said wall at said section.

The vanes 80 are thermally coupled to said section of said wall by metallurgical bonding (col. 5, lines 30-31).

### ***Cited Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. United States Patent No. 4,073,338 is cited for showing in Fig. 11, flattened donut-shaped coolant paths and fin structures with crests and valleys alternatingly arranged between coolant paths.

### ***Allowable Subject Matter***

Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-27 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Each of claims 5-27 require flanges on plates being secured and sealed together to define flattened nominally donut-shaped unit defining annular flow parts of the coolant flow path. The '279 patent, referenced above, teaches fins 82 for the heat exchange means, which does not fairly suggest flanged plates secured and sealed

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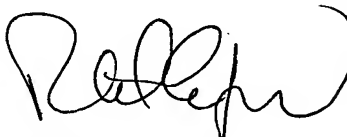
together to define a flattened donut-shaped unit defining flow parts. Furthermore, one having ordinary skill in the art would not be motivated to modify the fins of the '279 patent with the heat exchanger shown in U.S. Patent No. 4,073,338, since the fins 16 are actually rotating blades, and not stationary members.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Monday thru Friday, 8:00 am until 4:00 pm EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar  
Examiner  
Art Unit 3745

RE



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2/5/05